

IN THE CLAIMS

1 1. (Currently Amended) Non-human transgenic animal, being [~~transgenic~~] transgenic for
2 an anti-NGF (Nerve Growth Factor) antibody [~~or fragments thereof and~~] having a phenotype
3 reminiscent of a human [pathology] neurodegenerative syndromes, muscular atrophy or
4 dystrophy or immune disorders.

1 2. (Cancelled).

1 3. (Currently Amended) A non-human transgenic animal according to claim [2] 1
2 wherein the [human pathology is the] phenotype recapitulates the features of the human
3 Alzheimer disease (AD).

1 4. (Currently Amended) A non-human transgenic animal according to claim 3 exhibiting
2 at least one of the anatomical, histological, molecular or phenotypic markers included in the
3 following group: deposition in Central Nervous System (CNS) of plaques of amyloid precursor
4 protein (APP) or of β-amyloid protein, hyperphosphorylation of the tau protein, neurofibrillar
5 pathology, and deficits in the cholinergic system.

1 5. (Currently Amended) A non-human transgenic animal according to claim 4 further
2 exhibiting at least one of the anatomical, histological, molecular or phenotypic markers included
3 in the following group: glial activation, neuronal loss, cortical and hippocampal atrophy, and
4 muscular myositis.

1 6. (Currently Amended) A non-human transgenic animal according to claim 5 exhibiting
2 the following anatomical, histological, molecular or phenotypic markers: deposition in Central
3 Nervous System (CNS) of plaques of amyloid precursor protein (APP) or of β-amyloid protein,

4 hyperphosphorylation of the tau protein, neurofibrillar pathology, deficits in the cholinergic
5 system, glial activation, neuronal loss, cortical and hippocampal atrophy, and muscular myositis.

1 7. (Currently Amended) A non-human transgenic animal according to claim 6 exhibiting
2 the anatomical, histological, molecular or phenotypic markers as defined [~~in Table 1~~] by
3 decrease of cortical thickness, hippocampal formation atrophy, ventricle dilation, cognitive
4 deficits, neuronal loss, apoptosis, β-amyloid plaques, hyperphosphorylated tau, neurofibrillary
5 tangles, tau aggregates, dystrophic neuritis, glial activation, cholinergic deficit, synaptic loss,
6 decreased synaptic plasticity, skeletal muscle atrophy and dystrophy, amyloid deposits in
7 skeletal muscles, hyperphosphorylated tau in skeletal muscles, inflammation in skeletal muscles,
8 vacuolization of myofibers, increased number of central nuclei in myofibers, or spleen
9 alterations.

1 8. (Original) A non-human transgenic animal according to claim 7 wherein said markers
2 are expressed in the adult age.

1 9. (Original) A non-human transgenic animal according to claim 7 wherein the
2 occurrence of the tau hyperphosphorylation and/or the β-amyloid protein deposition in the back
3 or lower limb skeletal muscles and/or the atrophy of said skeletal muscles are present
4 concomitantly to the earliest occurrence of other neurological markers.

1 10. (Cancelled)

1 11. (Original) A non-human transgenic animal according to claim 1 wherein the anti-
2 NGF antibody blocks the binding of NGF to its receptors.

1 12. (Original) A non-human transgenic animal according to claim 1 wherein the anti-
2 NGF antibody is expressed mainly in adulthood

1 13. (Original) A non-human transgenic animal according to claim 12 wherein the anti-
2 NGF antibody levels in the serum of the adult animal are comprised between 50 ng/ml and 500
3 ng/ml.

1 14. (Currently Amended) A non-human transgenic animal according to claim [10] 1
2 wherein the anti-NGF antibody is the monoclonal anti-NGF α D11 antibody.

1 15. (Original) A non-human transgenic animal according to claim 14 wherein the α D11
2 antibody is a α D11 chimeric antibody.

1 16. (Original) A non-human transgenic animal according to claim 15 wherein the
2 chimeric antibody is a humanised chimeric antibody.

1 17. (Previously Presented) A non-human transgenic animal according to claim 1, wherein
2 the animal is a mammalian.

1 18. (Original) A non-human transgenic animal according to claim 17 belonging to the
2 murine genus.

1 19. A non-human transgenic animal according to claim 18 belonging to the *Mus musculus*
2 [B6SJL] B6SJL strain.

1 20-37.(Cancelled)